

THE FOREST COCKROACH, *ECTOBIUS SYLVESTRIS* (PODA),
A EUROPEAN SPECIES NEWLY DISCOVERED IN NORTH
AMERICA (DICTYOPTERA: BLATTODEA: ECTOBIIDAE)

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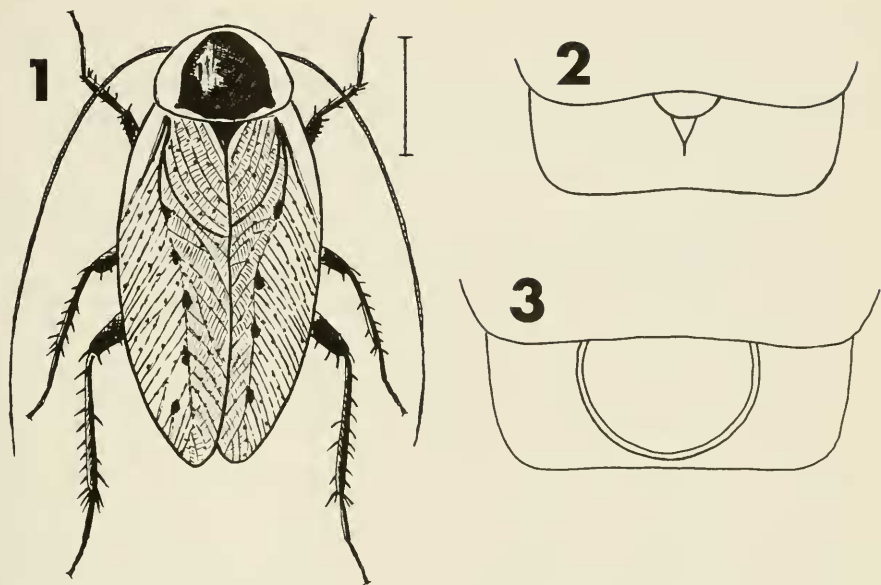
Abstract.—*Ectobius sylvestris* (Poda) was collected in 1980 in New York State, the first record of this European species for North America. This is the second European member of the genus *Ectobius* potentially to become established in North America. *Ectobius sylvestris* is described briefly, and its dorsal habitus and external male characters are illustrated. Helfer's key to the cockroach species occurring in North America is modified to include *E. sylvestris*.

A European cockroach, *Ectobius sylvestris* (Poda), was detected in North America in June 1980 with the collection of a single male specimen in a home at Geneva, New York¹. One of us (ERH) received this specimen for identification; it did not agree with any of the native North American species, but it did key readily to *E. sylvestris* in the European literature (Chopard, 1951; Princis, 1965; Harz and Kaltenbach, 1976). This specimen was sent to DAN for confirmation.

In this paper, we discuss recognition features, known distribution, biology, and habits of *E. sylvestris*. Only one other species of the genus *Ectobius*, *E. pallidus* (Olivier), has been reported in the United States (Flint, 1951; cited as *lividus* (Fabricius)). Distinctive characters of *E. pallidus* and available information on its distribution and general bionomics are discussed by Gurney (1953; cited as *livens* (Turton)). At present it is known to occur in Massachusetts and Michigan (Gurney, 1968).

Ectobius sylvestris (Fig. 1) is a relatively small species, about 7.5 to 11

¹ Since the submission of this paper for publication, 2 ♂ and 4 ♀ of this species have been collected by Siegfried Lienk between May 25 and July 16, 1981 at another locality in Geneva, New York. Two specimens were found in a home, while the other 4 were collected in traps out of doors.



Figs. 1, 3. *Ectobius sylvestris*. Fig. 2. *E. pallidus*. 1, Dorsal habitus, male (scale line = 2.5 mm). 2, 3, Dorsal abdominal glandular depression of 7th tergum, male (adapted from Princis, 1965).

mm in overall length (range in length is based on available literature: the New York specimen is approximately 10 mm in length); general color yellowish brown; head and antennae blackish; pronotum black or blackish red with pale, transparent margins; tegmina (fully developed in male; reduced and truncate in female) pale yellowish brown with a few darker blotches, and a few small black spots; nerves pale; hindwings fully developed in male, slightly infuscated, with a distinctive intercalated triangle (see Gurney, 1968: 686, fig. 2); legs, abdomen, and cerci dark.

Based on the dorsal habitus, there are a few native North American species which might be confused with *E. sylvestris*. *Pseudomops septentrionalis* Hebard, *Leurolestes pallidus* (Brunner), and two species of *Parcoblatta*, *P. divisa* (Saussure and Zehntner) and *P. pennsylvanica* (De Geer), all resemble *E. sylvestris* rather closely in having a dark pronotal disc with pale, transparent margins. However, they differ from *E. sylvestris* in lacking the well-developed intercalated triangle of the hindwing and are generally larger in overall length.

We have modified Helfer's (1963) key to include both species of *Ectobius* now known to occur in North America; couplet #45 (p. 58) is altered as follows. Figure numbers herein refer to those in this paper.

- 45a. Ventroposterior margin of anterior femur with conspicuous spines (*Ectobius*) 45'
- 45'a. Pronotal disc pale yellowish brown with marginal area transparent, marked with reddish brown spots; male dorsal abdominal glandular depression oval, slightly transverse, hindmargin not reaching middle of 7th tergum (Fig. 2); Spotted Mediterranean cockroach *Ectobius pallidus* (Olivier)
- 45'b. Pronotal disc black or blackish red with marginal area transparent (Fig. 1); male dorsal abdominal glandular depression round and large, hindmargin convex and nearly reaching apical margin of 7th tergum (Fig. 3); Forest cockroach *Ectobius sylvestris* (Poda)
- 45b. Ventroposterior margin of anterior femur lacking conspicuous spines or with a fringe of stiff hairs and one spine at apex 46

Ectobius sylvestris occurs throughout most of Europe (excluding the British Isles), including Sweden, Finland, Denmark, Holland, Belgium, France, Germany, Switzerland, northern Italy, Australia, Czechoslovakia, Yugoslavia, Bulgaria, Hungary, Rumania, Poland, and European USSR (Princis, 1971; Harz and Kaltenbach, 1976). Three subspecies of *E. sylvestris*, *sylvestris* (Poda), *discrepans* Adelung, and *lucidus* (Hagenbach), based primarily on pronotal disc color differences, are recognized in Europe. The specimen from Geneva, N.Y., agrees with the subspecies *discrepans*.

Only one American locality is known at present for *E. sylvestris*, i.e., Geneva, N.Y. One male specimen was collected some time before the end of June 1980 by Mrs. L. K. Brandt and submitted for identification by S. E. Lienk of the New York State Agricultural Experiment Station, Cornell University, Geneva, N.Y. Mrs. Brandt stated that the specimen was found in her kitchen. She noted also that a son had returned from Europe the previous summer and that much of his baggage and goods were stored in the basement. It is possible then that there is an established population in the basement of the Brandt residence and that this species is not found elsewhere.

Ectobius sylvestris, like the related species *E. lapponicus* (L.) and *E. pallidus*, lives in a variety of outdoor habitats. It is found commonly on the ground in forests, particularly in mountainous areas (Dierl, 1978). A summary of the biology, mating, and oviposition habits of *E. sylvestris* is provided by Harz (1960).

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